Organizational reward allocation: a comparison of British and German organizations

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Abstract

The present paper reports two studies investigating the use of reward allocation principles based on equity, equality, need and seniority by work organizations in Germany and the UK. The study sampled participants from various organizations to replicate some findings from laboratory studies involving students. Consistent with predictions, equity was more important in the UK than Germany. Contrary to previous laboratory studies, need was more important in the UK than Germany. Large differences between private and public sector organizations were found. More research focusing on real-life allocations is needed to develop a better understanding of cross-cultural differences.

Keywords: Reward allocation; Equity; Equality; Need; Seniority; Organizational justice; Culture

1. Introduction

Understanding cross-cultural differences in reward allocation is of great importance because of implications for managers around the globe (Erez & Earley, 1993). Managers frequently have to decide how to distribute pay raises, on what basis to promote employees or how to ask employees to leave. Not surprisingly, this research has enjoyed great popularity in the last two decades (Leung, 1997). Researchers have focused on what principles are used by individuals from different cultures when allocating rewards. The three most common allocation rules in cross-cultural research are equity (Adams, 1965), equality and need (Deutsch, 1975;
Seniority has been added more recently as a fourth allocation principle of importance for cross-cultural research (Chen, 1995; Rusult, Insko, & Lin, 1995). This research has been driven by Adams’ (1965) equity theory. This theory is concerned with the ‘just distribution of wealth, power, goods, and services in society’ (Adams, 1965, p. 267). Employees engage in social exchange, where they contribute something in expectation of rewards. Consequently, they compare the ratio between their inputs (contribution) and outcomes (rewards) with the ratio of referent others. Adams did not specify the relevant inputs or outcomes for any given exchange, but subsequent researchers have mostly focused on contributions or inputs in terms of task performance (Kanfer, 1990). In contrast, equality refers to the principle that all organizational members receive the same regardless of their contribution (Deutsch, 1975). The need rule mandates that organizational members receive allocations depending on their personal need (Deutsch, 1975). Finally, seniority refers to a more generous allocation to more senior and older individuals. Previous reviews of the literature have suggested that equity-based allocations are more prevalent in individualistic cultures, whereas reliance on the equality principle is more prevalent among collectivistic cultures, when allocating rewards within in-groups (e.g., Smith & Bond, 1998). However, explanations of these differences have often been inconsistent and contradictory. Some of these inconsistencies can be explained in terms of the differing research methodologies employed by the various researchers (Fischer & Smith, 2003). It needs to be tested how valid conclusions are that are based on studies using specific research methods and relying on specific populations.

Therefore, the present study focuses on two cultural samples and investigates cultural differences in reward allocation between the UK and Germany. One might argue that these two countries appear quite similar on a global scale. Both countries are key players within the European union and have enjoyed close partnerships in the last four decades. Although these two countries share many similarities in terms of economic and political development, these similarities are accompanied by differences in intellectual, philosophical and economic thinking (Perlman & McCann, 1998; Russell, 1945/1992), prevailing economic systems (e.g., Albert, 1993) and recent political systems and structures (e.g., Wegener, 1995). Management styles and company structures (Foley, 1998; Glunk, Wilderom, & Ogilvie, 1997; Stewart, Barsoux, Kieser, Ganter, & Walgenbach, 1994, 1996), as well as patterns of worker representation in companies (Hampden-Turner & Trompenaars, 1993) and human resource traditions (Muller, 1999), have also been found to differ between the two countries. In terms of cultural values, various large-scale surveys also reported differences. Hofstede’s (1980) seminal study of IBM employees found British participants to be more individualistic compared with the (West) Germans. The greatest difference was found in terms of uncertainty avoidance, with Germans being less tolerant of uncertainties and ambiguities in their everyday life as opposed to a greater tolerance of uncertainty and ambiguity as reported by British participants. Germans were also somewhat higher on collectivism compared with the British. Ronen and Shenkar (1985) subsequently included the former West Germany into a Germanic country cluster, whereas Britain was
part of an Anglo-Saxon culture cluster. In additional to these differences between Britain and the former West Germany, the division of Germany after World War II has resulted in differences within Germany. A number of studies included samples from the two separate parts. Smith, Dugan, and Trompenaars (1996) found that East German scored higher on conservation-related values compared with either West German or British managers. Schwartz (1994) did not report data from the UK, but data from the two German parts suggested that East Germans are lower on openness to change-related dimensions (autonomy) compared to West Germans, whereas East Germans are higher on conservation-related dimensions (hierarchy, conservatism). Therefore, the Eastern part appears to be more collectivist and conservative than the former Western part. The present study includes mainly citizens of the former East Germany, therefore, these differences will be important.

Considering allocation behaviour, a study by Berman and Murphy-Berman (1996) examined the different perceptions of allocators by West German students with perceptions of US students. They presented their participants with scenarios describing one employee as having average work performance, but a poor financial situation and an illness in his family, while the other one had excellent performance and enjoyed an adequate social and economic situation. Consequently, Person A was always needy and Person B always meritorious. Furthermore, they included a condition where allocators took money away (pay cut—negative resource condition) or distributed money (bonus—positive resource condition). The dependent variables were the perceived fairness of the hypothetical allocation and the perceptions of the allocator. The complex pattern of the results suggested that US Americans face a real dilemma when allocating money. If they decided in favour of the equity rule, they were viewed as more strong, intelligent and logical and their decision was seen as fairer, but they were not liked as much as a need allocator nor were they considered as warm and nice. On the other hand, a need distribution would result in a more positive evaluation of the allocator as warmer and nicer, but at the same time s/he would be seen as less intelligent, logical and strong and his or her decision as less fair. Such a dilemma would not occur for the German subjects. They saw the need allocator as significantly fairer regardless of the situation and did not differentiate in regard of intelligence or logicalness. The manipulation of positive or negative situation had no effect at all in the German sample. These results were interpreted in terms of the supposedly higher cultural collectivism in Germany. This higher collectivism is reflected in a comprehensive social security net which pays attention to the need of individuals.

Therefore, this study suggests that Germans, especially West Germans, are considering need as more important regardless of the resource situation. However, this study as most previous studies has been conducted in laboratory settings with students as participants, which raises concerns about the ecological validity of these findings. It has to be shown whether this pattern can be replicated in real-life contexts. Therefore, I will briefly discuss some problems of previous laboratory studies before introducing the hypotheses and research design for the present studies.
2. Some shortcomings of prior studies of reward allocation

A major shortcoming has been the reliance on verbal scenarios describing hypothetical situations. The study by Berman and Murphy-Berman (1996) is a typical example where participants are required to evaluate the allocation of rewards to fictitious persons according to their description in a scenario. The allocation in itself is artificial and has no real-life consequences for the allocator. Mann, Radford, and Kanagawa (1985) showed that children used different allocation principles depending on whether the allocation had real-life consequences or not. Managers in organizational settings frequently interact with their subordinates and it is important for them to consider how the recipients of the allocation might react and behave in the future. For example, research on performance appraisal has shown that managers consider various aspects of the employee beyond simple task performance (e.g., MacKenzie, Podsakoff, & Fetter, 1991). Laboratory studies are excellent for achieving high internal validity, but external validity is needed if results are to have practical applicability. Trade-offs in terms of methodological demands are often the negative side of field research. More field studies of actual reward allocation are required and the present study is intended as a step in that direction.

Related to this problem is the reliance on university students as participants. It has to be questioned whether students are representative of workers or managers in organizations. For example, Wagstaff (1997) reported that British students allocated money significantly more equally between children than did working adults. A meta-analysis by Fischer and Smith (2003) showed that effect sizes in laboratory studies differed depending on whether participants were students or managers. Even studies using students working part-time found that these students had different job attitudes compared with other part-time employees in similar jobs (Sinclair, Martin, & Michel, 1999). It is necessary to study employees rather than students, if conclusions valid for organizations are to be drawn. Therefore, the present study examines reported allocation principles in real-life settings in Britain and Germany.

3. Hypotheses

As Germany has been found to be somewhat more collectivist (Hofstede, 1980) and more egalitarian compared with Great Britain (Schwartz, 1994), it could be predicted that German companies allocate material rewards more equally than British companies, whereas British companies are expected to rely more on performance than German ones.

Hypothesis 1. German organization will allocate rewards more equally compared with British organizations, whereas British organizations will be more equitable compared with German ones.

The study by Berman and Murphy-Berman (1996) reported a high preference for need allocators among German students compared to American students. The findings were explained in terms of collectivism. Since the Eastern part is considered even more collectivistic than the Western part (Smith et al., 1996), the differences
should be even stronger. The US and the UK have relatively similar value systems (e.g., Hofstede, 1980). The study by Giacobbe-Miller, Miller, and Victorov (1998) found less concern for need distributions among American managers than Russian, therefore, it is expected that British organizations also place less emphasis on need.

Hypothesis 2. British organizations will rely less on need compared with German organizations.

The third hypothesis concerns seniority. The somewhat greater egalitarianism in Germany might result in higher loyalty to one’s company. Egalitarianism comprises values like loyalty, helpfulness and responsibility. Loyalty to the group is an important value and long tenure indicates loyalty towards one’s organization. The organization itself may value such an intention to remain a member of the organization by considering the time employees have spent in the company when distributing rewards. In fact, German employees are more committed to their work and more loyal to their company than British individuals (Taylor, 1998). Companies spend more money on education and vocational training of employees in Germany than in Britain (e.g., Glunk et al., 1997). German companies have the expectation that these highly trained employees contribute to the success of the company in the long run. Furthermore, there is a strong tendency to avoid uncertainty in Germany (Hofstede, 1980). Companies may be interested in a steady working force. Turnover of an employee and the hiring of a new member involves a certain amount of uncertainty. For individuals, changing the workplace would mean a loss of security and stability as well as an uncertain future perspective. This mutual dependency should lead to a reliance on people with a longer organizational tenure. Consequently, seniority might be more important in German organizations than in British companies.

Hypothesis 3. German organizations are more reliant on seniority compared with British organizations.

Finally, public and private sector companies differ in their goal priorities. Private companies stress profit more than do public companies (e.g., Aycan et al., 2000). Pfeffer and Langton (1988) reported higher wage inequalities in private academic institutions compared with public academic institutes. Previous research has also shown that it is easier to reach an agreement favouring equity than it is to allocate rewards equally under time pressure (Mannix, Neale, & Northcraft, 1995). Given the high task orientation and time pressure in private organizations, it is likely that equity is a more important and more frequent allocation rule than found in public organizations.

Hypothesis 4. Equity is more important in private sector organizations, whereas equality is more important in public sector organizations.

4. Study 1

The aim of this study was to develop a questionnaire suitable for use in field settings and to conduct initial tests of the hypotheses.
4.1. Method

Reward allocation questionnaire: A survey was constructed in which participants were asked to recall typical occasions in their organization when somebody received a pay raise, was promoted or was asked to leave the company. They were then asked to indicate, in relation to each of these events, the extent to which each reward allocation principle was used on five-point scales, with the anchoring labels ‘to a great extent’, ‘to some extent’, and ‘not at all’.

Equity: Existing instruments focus more on outcome satisfaction or general outcome fairness perceptions rather than on equity as a performance input (Niehoff & Moorman, 1993; Moorman, 1991; Tyler & Lind, 1992; Konovsky & Pugh, 1994). The present aim was to study the extent to which performance was used in organizations, without considering which aspects of performance are important (effort, talent, motivation, etc.). Therefore, equity items were phrased in terms of general standards of performance (e.g., ‘People who perform better get more money’). A qualifying sentence was added in brackets after each item to stress the individualistic and success-oriented nature of equity (‘according to their individual contribution to the success of their organization’).

Equality: Equality has previously been measured either as a preference for an equal distribution of rewards (Berman et al., 1985) or as the relative proportion of rewards given to each recipient (Hui, Triandis, & Yee, 1991). However, in field contexts it is not possible to quantify equality of amount. Furthermore, equality may relate to equality of outcomes, equality of opportunities or equality of treatment (Junge, 1995). Equality was here measured as equality of treatment (‘All employees at the same level are treated equally’). Equality of treatment should result in equal outcomes, because it precludes any preferential or differentiated allocations and consequently all members at a certain level should receive the same rewards.

Need: Personal need has previously been operationalized in terms of either age (Kashima, Siegal, Tanaka, & Isaka, 1988), medical problems of family members (Berman et al., 1985) or poor financial situation, or many family members (e.g., Berman et al., 1985). Need was here described as an illness in the family, financial hardships or personal problems. This description was given in brackets after the item phrased as: ‘Need is taken into account’ was presented.

Seniority: Seniority involves both tenure and age. Tenure has been operationalized as the time an employee has been a member of a company (e.g., Chen, 1995). Model tenure items in the present study were: ‘The longer you stay in your company the more you earn’ or ‘The longer you stay in your company the less likely is it that you are asked to go’. Age items were phrased similarly. Model items are: ‘The older you are the more you earn’ or ‘The older you are the less likely is it that you are asked to go’.

The questionnaire thus contained 15 questions relating to reward allocation (three events × five allocation principles). Further items referred to respondents’ demographic details, including their age, tenure, gender and whether their organization was privately or publicly owned. All items were created in English and were subsequently translated into German by the first author. A back-translation by a
bilingual postgraduate student was compared with the original version and minor adjustments made. Finally, a bilingual organizational psychologist familiar with justice research checked the equivalence of the language versions.

Participants: Copies of the questionnaire were given to psychology students at the University of Sussex, UK and to social science students at the University of Leipzig, East Germany. They were asked to give the questionnaire to parents, relatives or friends who were employed full time. British students received credits for completed questionnaires. Data collection took place during 1999.

Eighty-seven responses were received in UK and 70 in Germany. There were no gender differences: $\chi^2(1) = 0.03$, n.s., with about 58 percent females, no age differences: $t(152) = 1.63, p<0.05$; and no differences in tenure: $t(153) = 0.96, p<0.05$. There was a difference by sector: $\chi^2(1) = 5.12, p<0.05$, with 76 percent of British employees working in private sector organizations compared with 59 percent of German employees. 81 percent of the German participants came from the former East German part.

4.2. Results

Dimensionality of the questionnaire: Principal Component Analysis was performed to assess the dimensionality of the whole questionnaire. Four factors were obliquely rotated in the combined sample, after variables had been normalized and $z$-transformed within each sample separately (van de Vijver & Leung, 1997). Together, they accounted for 62.25 percent of the variance. Clear equity, equality, need and seniority factors emerged using an oblique rotation. Separate analyses in the two samples confirmed this structure. Using rotations targeted to the structure found in the combined sample (van de Vijver & Leung, 1997), congruence coefficients were computed with values $>0.90$, indicating high factorial agreement (van de Vijver & Poortinga, 2002). The mean congruence was 0.94 (range 0.88–0.98) in the UK sample and 0.92 (range 0.87–0.95) in the German sample. Given the small sample size, this indicates an impressive similarity of the factor structure (e.g., Leung et al., 2002). Internal consistencies exceeded the recommended 0.70 (Nunnally, 1978) (see Table 1). Consequently, the survey can be used to measure the reliance of organizations on equity, equality, need and seniority.

Table 1
Descriptive statistics for study 1

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>SD</th>
<th>Alpha</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
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<tbody>
<tr>
<td>1. Equity</td>
<td>3.44</td>
<td>1.15</td>
<td>0.83</td>
<td>0.06</td>
<td>0.17</td>
<td>0.00</td>
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<tr>
<td>2. Equality</td>
<td>2.91</td>
<td>1.14</td>
<td>0.83</td>
<td>0.16</td>
<td>—</td>
<td>0.14</td>
</tr>
<tr>
<td>3. Need</td>
<td>2.48</td>
<td>1.17</td>
<td>0.84</td>
<td>0.12</td>
<td>0.27*</td>
<td>—</td>
</tr>
<tr>
<td>4. Seniority</td>
<td>2.57</td>
<td>0.84</td>
<td>0.70</td>
<td>0.04</td>
<td>—</td>
<td>0.18</td>
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<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
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</thead>
<tbody>
<tr>
<td>1. Equity</td>
<td>2.89</td>
<td>1.23</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>2. Equality</td>
<td>2.85</td>
<td>1.12</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>3. Need</td>
<td>2.20</td>
<td>0.93</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>4. Seniority</td>
<td>2.64</td>
<td>0.89</td>
<td>0.73</td>
<td></td>
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</tbody>
</table>

*p <0.05; **p <0.01.
Mean differences: A two-way ANOVA with country and sector as between-subject variables was run. The main effect of country on equity: \( F(1, 148) = 25.11, p < 0.001 \) was significant. Equity was more important in Britain than in Germany, which is in line with hypothesis 1 about cultural differences. Furthermore, the main effects of sector on equity: \( F(1, 148) = 4.09, p < 0.05 \); equality: \( F(1, 146) = 8.76, p < 0.01 \), and need: \( F(1, 149) = 7.51, p < 0.01 \) were all significant. Equity was reported as more important in private organizations (3.55) than in public organizations (2.46). In contrast, equality was more important in public (3.26) than in private organizations (2.72). This supports Hypothesis 4. Finally, consideration of need was more often reported by employees from private companies (2.52) than public organizations (1.98). No other main: \( F_{\text{max}}(1, 146) = 1.14, p < 0.10 \), or interaction effect: \( F_{\text{max}}(1, 146) = 0.77, p < 0.10 \) was significant.

4.3. Discussion

The study provided support for hypothesis 1 which predicted that equity would be more important in the UK than in Germany. Hypothesis 4 was fully supported with equity being more important in private sector organizations, whereas public organizations were more egalitarian. However, hypothesis 2 was not supported. In fact, an inspection of the means suggested the opposite pattern, namely that need is more often used in the UK than in Germany. Therefore, a larger sample is needed to replicate this pattern. Finally, there was no difference between the British and German sample in terms of seniority. This does not support the hypothesis, although there was a small, but nonsignificant difference in the direction of the hypothesis. However, to arrive at better conclusions regarding cultural differences, these findings have to be replicated. Therefore, the goal of study 2 was to survey the allocation principles used by organizations in Germany and the UK using a larger sample.

5. Study 2

5.1. Method

Participants: Students were again asked to hand the questionnaire to those who were in full-time employment. One hundred and eighty-four forms were received from East Germany and 150 from UK. This sampling method does not allow a calculation of response rate. Data collection took place between 1999 and 2000. One hundred and thirty of the UK respondents were British nationals. The remaining 20 were dropped from further analyses. The samples from East Germany and Great Britain were roughly comparable. There were no differences for gender: \( \chi^2(1) = 0.00 \), n.s., with equal numbers of males and females; for size of company: \( \chi(2) = 3.53 \), n.s. and for occupational status: \( \chi^2(1) = 2.36 \), n.s., with about 84 percent non-managerial employees. The samples differed in terms of sector: \( \chi^2(1) = 4.68, p < 0.05 \), with more East Germans being employed in public sector firms (37 percent) compared with the UK (25 percent); in tenure: \( F(1, 309) = 9.04, p < 0.01 \), with average tenure longer for
East Germany (8.8 years) than for UK (6.2 years); and in age: $F(1,312) = 38.36, p < 0.001$, with the British being younger (32 years) than East Germans (39 years).

**Reward allocation questionnaire:** The same questionnaire as in the previous study was used. The response format was changed slightly. Participants were now asked to indicate how often each principle was used when decisions were made in their organization. The labels were ‘always’, ‘often’, ‘sometimes’, ‘seldom’ and ‘never’. To further test the psychometric properties, the underlying structure was examined using confirmatory factor analysis with LISREL 8.5. Since items were repeated for the different decisions, I allowed error variances to covary (Bollen, 1989; Long, 1983). Chi squares were 66.1 in the German sample and 147.1 in the British sample with 55 df. The CFI was 0.98 in Germany and 0.87 in Britain. This indicates good to excellent fit (Marsh, Balla, & McDonald, 1988).

The internal consistencies were mostly satisfactory (Table 2). Given acceptable mean item intercorrelations (all $r > 0.35$), those alpha levels that were lower than 0.70 are due to the small number of items on the scale (e.g., Cortina, 1993) and can be considered still within the acceptable range for research instruments (Nunnally, 1978).

### Table 2
Descriptive statistics for study 2

<table>
<thead>
<tr>
<th></th>
<th>UK Mean</th>
<th>SD</th>
<th>Alpha</th>
<th>1 Mean</th>
<th>SD</th>
<th>Alpha</th>
<th>2 Mean</th>
<th>SD</th>
<th>Alpha</th>
<th>3 Mean</th>
<th>SD</th>
<th>Alpha</th>
<th>4 Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equity</td>
<td>3.37</td>
<td>0.82</td>
<td>0.74</td>
<td>0.07</td>
<td>0.45**</td>
<td>0.20**</td>
<td>3.18</td>
<td>0.85</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Equality</td>
<td>3.51</td>
<td>0.83</td>
<td>0.81</td>
<td>0.32**</td>
<td>0.25**</td>
<td>0.20**</td>
<td>3.47</td>
<td>0.92</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Need</td>
<td>2.80</td>
<td>0.96</td>
<td>0.82</td>
<td>0.26**</td>
<td>0.46**</td>
<td>0.19*</td>
<td>2.25</td>
<td>0.78</td>
<td>0.64</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. Seniority</td>
<td>2.72</td>
<td>0.65</td>
<td>0.73</td>
<td>0.43**</td>
<td>0.08</td>
<td>0.28**</td>
<td>2.85</td>
<td>0.73</td>
<td>0.72</td>
<td></td>
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</table>

*p < 0.05; **p < 0.01.

5.2. **Results**

Two-way ANOVAs with country and sector as between subject variables were performed. There was a significant main effect for sector on equity: $F(1,304) = 38.36, p < 0.001$; with public sector organizations using less equity ($M = 2.85$) compared with private sector organizations ($M = 3.45$). This supports hypothesis 4. The effect of country: $F(1,304) = 0.27$, was not significant, neither was the interaction effect: $F(1,304) = 2.86$. Although the means were in the expected direction, the difference was not significant and, therefore, hypothesis 1 was not supported.

There was no significant effect on equality: $F_{\text{max}}(1,303) = 0.95$, therefore hypotheses 1 and 4 were not confirmed.

There was a significant effect of country on need: $F(1,303) = 21.74, p < 0.001$. The means indicated that British organizations used need more often ($M = 2.80$) compared with German organizations ($M = 2.25$). Therefore, this pattern contradicts hypothesis 2. Similar to study 1, there was a significant main effect of sector on
need: $F(1,303) = 8.41, p < 0.01$, with private organizations relying more on need $(M = 2.66)$ compared with public sector organizations $(M = 2.22)$. The interaction effect was not significant: $F(1,303) = 0.03$.

Finally, there was a significant main effect of sector on seniority: $F(1,308) = 9.85$, but no main effect of country: $F(1,308) = 1.42$. However, this main effect was qualified by an interaction with country: $F(1,308) = 16.53, p < 0.001$. Public sector organizations in Germany were most reliant on seniority $(M = 3.01)$ with private sector organizations in both Germany and Britain relying somewhat on seniority $(M_{\text{Germany}} = 2.76; M_{\text{UK}} = 2.84)$, whereas British public sector organizations used seniority least often $(M = 2.38)$. Therefore, the pattern of the interaction effect provides partial support for hypothesis 3.

6. Discussion

This study reported the development of a survey instrument that can be used to test whether findings obtained in laboratory-based reward allocation studies can be replicated in real-life organizations. Four principles were derived from factor analysis of the instrument, namely equity, equality, need and seniority. Using this instrument, it was tested whether organizations in Germany and Britain use these four principles to different degrees when making allocation decisions, as could be expected from previous laboratory studies.

Generally, as predicted by hypothesis 1, equity was more important in Britain than in Germany, although a significant effect was only observed in study 1. Matsumoto, Grissom, and Dinnel (2001) urged researchers to consider effect sizes in addition to significance levels in comparative cross-cultural studies. The effect size $d$ in study 1 was 0.46, whereas $d$ was only 0.22 in study 2. Combining the two effect sizes and weighting them by sample size (Shadish & Haddock, 1994), the resulting effect size was 0.38. This effect size is significant at a 0.001 level ($z = 4.05$). According to Cohen (1992), this indicates a small to medium effect size. Consequently, there seems to be a significant but small difference between the two countries in terms of the consideration of equity when making human resource decisions.

The second part of hypothesis was not supported, because there were no sizeable differences between two samples in terms of equality. Therefore, organizations in Britain are more equitable, but German organizations are not more egalitarian. Therefore, the pattern indicates that equity and equality are independent of each other.

Hypothesis 3 was not supported. In fact, the effect was exactly opposite to what was predicted based on the results by Berman and Murphy-Berman (1996) who had studied (West) German and US students using a scenario approach. The effect size was 0.27 in the first study and 0.63 in the second study. The sample size weighted combined effect size was 0.50, which is highly significant ($z = 5.31, p < 0.0001$). British participants’ rating of the use of need in their organization was half a standard deviation higher compared with the German participants. According to Cohen, this is a moderate effect size. Three explanations can be considered. First, the
tight and comprehensive social security net in Germany (Albert, 1993) might free
organizations from taking care of the immediate personal needs of employees,
because employees can obtain additional support if faced with personal hardship. In
UK, the social security net is less tight and, consequently, the need and well being of
employees might be more of an issue for companies. If this explanation were to be
true, then a similar pattern of low consideration of need in both parts of Germany
would be expected.

A second explanation might be found in the recent history of East Germany. In
former state socialist countries, there was a strong emphasis on equality and citizens’
welfare. After German reunification in 1990, newly appointed managers (many
drawn from West Germany or from previously marginalized political groups) were
keen to distance themselves from the socialist practices and might therefore take less
account of need.

A third possible explanation is the poor economic situation in East Germany. At
the time of this study, unemployment was still considerably above the European
average, with unofficial estimates approaching 50 percent in some areas.
Productivity, innovation and investment still lag behind West German standards
(King, Samaras, & Ehrhard, 1996). Consequently, organizations could not afford to
allocate resources to employees in need.

A related study by the author (Fischer, Smith, & Richey, 2003) found that
probably the poor economic situation and the post-socialism hypotheses can account
best for these differences. They found that reliance on need was much lower in
East Germany, compared with the Western part of Germany, the UK, US and
New Zealand. This supported a post-socialist hypothesis. Furthermore, levels of
unemployment during data collection could partly explain the mean differences,
supporting the economic hypothesis.

Consequently, research is needed that examines reward allocation in real-life
organizations, taking into account economic and socio-political factors. Studying
students in laboratory settings is appropriate for investigating theoretical
processes; however, these findings have to be validated outside artificial laboratory
settings.

Hypothesis 3 predicted that seniority would be more important in Germany
compared with the UK. Only weak support was found. The interaction effect in
study 2 pointed in this direction, with German public sector organizations being
much more reliant on seniority than either private organizations in German or
public and private sector organizations in Britain. However, the combined sample
size weighted effect size across the two studies was 0.15 and it is not significant
($z = 1.64$). It seems that public organizations in Germany are more hierarchical and
bureaucratic and therefore rely more on seniority. This is in line with the common
stereotype of German public bureaucracy. However, private organizations in
Germany are less reliant on senior employees than would be expected, based on
previously observed cultural differences. Again, change from a state-socialist
environment to a market economy, together with the grave economic situation,
might make it less likely that organizations are relying on older employees with
values and work behaviours acquired through their socialization under a state
system. These values and behaviours are likely to be at odds with the current requirements and demands.

Concerning hypothesis 4, equity was found to be more important in private organizations compared with public sector ones. The sample size weighted combined effect size was 0.81 ($z = 7.81, p < 0.0001$). According to Cohen (1992), this constitutes a large effect size. Private organizations are more equitable in their reward allocation than public sector organizations. It is not surprising that this effect is larger than the cultural difference, given the nature of the two samples. However, this points to the importance of including contextual and organizational variables in experimental research in order to arrive at a better understanding of reward allocation processes in organizations.

However, the effect for equality was not significant across the two studies ($z = 1.57$, n.s.). The sample size weighted effect size was 0.26. Therefore, although private organizations are more equitable, public organizations are not more egalitarian.

Finally, need was found to be more important in private sector organizations with an effect size of 0.46, which was significant at a $p < 0.001$ level ($z = 4.20$). This is somewhat surprising. It seems that private organizations need to consider the well being of their employees more. Deutsch (1975) argued that if at a particular time an individual is in need it is important to allow him or her access to resources for satisfying this need. Otherwise, this particular individual will suffer potentially irremediable harm or loss. This would obviously be detrimental to the future ability of this individual to participate in the group as a competent member and therefore will limit the group’s future potential for survival and prosperity. Therefore, it seems that private sector organizations are interested in maintaining a highly efficient and effective workforce that will allow the organization to maintain a competitive advantage in the future. Although plausible, more research is needed to understand this process in more detail. However, this highlights that we need more research that focuses on organizations to understand reward allocation in context.

In summary, this study highlights that laboratory research using students needs to be complemented by research in real-life settings. This is in line with the meta-analysis by Fischer and Smith (2003) who reported different effect sizes for student and working populations across cultures. Furthermore, research has largely ignored contextual factors such as sector differences, which have a large effect on the reported effects across cultures. More research is needed focusing on the complex relationship between cultural, organizational and individual variables in real-life settings to examine the external validity of experimental studies.

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